

DQA:

Date:

13/08/06

13-07-23

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

13/8/1

Work Order update only ☐

Work Order: <u>103149 (split)</u>	DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. <u>02893-1 Support</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. <u>13-2897</u>		Machining <input checked="" type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	13-07-23	100	2	Ran the wrong program so the part moved...	Ue 13-07-23	Scrap + Replac.	13-07-23	DAS 4A 13-07-23	DAS 16 9-89
Doc/Data				operate correct program but still results.		+ Replac. 24v2			
Equip/Tooling	X			RC machine malfunction					
Handling/Pre									
Material									
Operator	✓								
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input checked="" type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 103149

June-17-13 7:36:01 AM

103149

Page 2

Item ID: D2893-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Support

Stop *NS2*

Start Date: 6/17/13 Start Qty: 20.00

20

Cust Item ID:

Required Date: 7/29/13 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

130

HandFXtube

Hand Finishing Crosstubes

Memo

0.00

Per note 8 on page 1 of dwg D2893, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg. 24h of cure time.

8

2

13-7-25

140

140

QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

13 7.26

8

170

170

Packaging

Packaging

Identify as per dwg & Stock Location: LG 50

0.00

Memo

0.00

8

0

0

13-7-26

Work Order ID 103149

June-17-13 7:36:01 AM

103149

Page 3

Item ID: D2893-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Support

Start Date: 6/17/13 Start Qty: 20.00

20

Cust Item ID:

Required Date: 7/29/13 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

MLJ 13-07-30

NF
13-7-29

Picklist Print

Page 1

June-17-13 7:36:06 AM

Work Order ID: 103149

103149

Parent Item: D2893-1

D2893-1

Parent Item Name: Support

Start Date: 6/17/13

Required Date: 7/29/13

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP: C02.11.26Reformat: Added P/OKJ

IPP D 06.04.19 removed alodine EC

IPP Rev:E Added priming as per Rev B 07-04-30 JLM

IPP F 08.03.19 Re-format EC verified by: DD

IPP Rev:G 08-05-15 add QC14 DD verified by:EC

IPP Rev:H

11.08.04 as per dwg rev.C DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK078		Manufactured	No			100	Each	16.0000	0.5	10.52632			

DSK078

D2893-1 TURNING DETAIL

**

85 13-07-11

Location

Loc Qty

Loc Code

MAT060

16

101400

10

93804

2

96578

4

107147
103894

46

x6

X1

13-07-23

DART AEROSPACE LTD		Work Order: 103149
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

			Record Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		3.000	3.000	3.000	3.000	2.997
AB	0.440	0.460		.450	.450	.450	.450	.450
AC	0.125	0.160		.131	.133	.133	.134	.130
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.190	.190	.190	.190	.190
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.152	.156	.148	.150	.151
AH	1.360	1.400		1.377	1.377	1.377	1.368	1.377
AI	0.040	0.060		.049	.046	.048	.048	.051
AJ	1.190	1.230		1.215	1.214	1.211	1.214	1.218
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.528	2.528	2.528	2.528	2.528
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.261	.261	.261	.261	.261
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: 47 <i>D. O. O.</i>	Date: 15-07-21
Audited by:	Date:
Preliminary Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	<i>[Signature]</i>

DART AEROSPACE LTD		Work Order: 103149
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	61	72	83	94	105
HAAS Section								
AA	2.985	3.005		2.999	3.000	2.999	2.297	2.999
AB	0.440	0.460		.450	.450	.450	.450	.450
AC	0.125	0.160		.132	.130	.130	.126	.128
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.190	.190	.190	.190	.190
AF	0.125	0.160		.142	.143	.140	.143	.142
AG	0.140	0.160		.145	.150	.145	.146	.149
AH	1.360	1.400		1.378	1.373	1.379	1.379	1.375
AI	0.040	0.060		.055	.050	.048	.049	.051
AJ	1.190	1.230		1.220	1.218	1.220	1.222	1.215
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.528	2.528	2.528	2.528	2.528
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.261	.261	.261	.261	.261
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: <i>KE</i>	Date: 15-07-22
Audited by:	Date:
Preliminary Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	<i>[Signature]</i>

DART AEROSPACE LTD		Work Order:	103149
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	13 (1)	14 (2)	15 (3)
HAAS Section								
AA	2.985	3.005		2.997	2.998	3.000	2.997	2.999
AB	0.440	0.460		.450	.450	.450	.450	.450
AC	0.125	0.160		.130	.132	.130	.130	.130
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.190	.190	.190	.190	.190
AF	0.125	0.160		.141	.140	.138	.136	.135
AG	0.140	0.160		.151	.152	.150	.150	.153
AH	1.360	1.400		1.379	1.374	1.378	1.379	1.378
AI	0.040	0.060		.049	.048	.047	.052	.045
AJ	1.190	1.230		1.221	1.217	1.215	1.222	1.215
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.528	2.528	2.525	2.525	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.261	.261	.261	.261	.261
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by:	ST. O. 13-07-23	Date:	13-07-22
Audited by:	44	Date:	13/07/25
Preliminary Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	

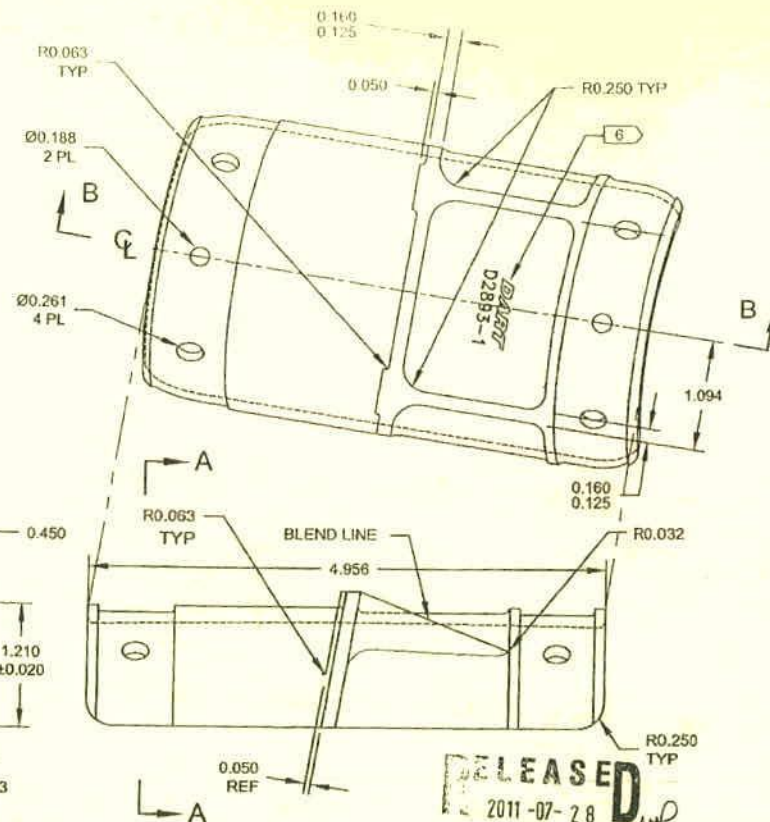
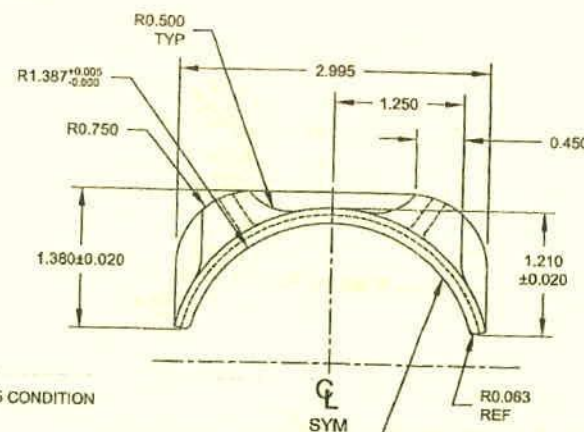
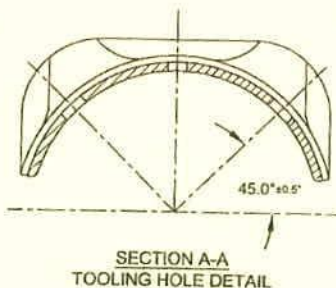
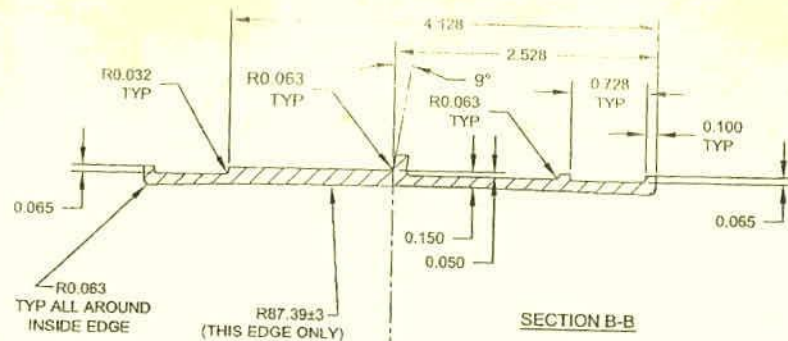
DART AEROSPACE LTD		Work Order:	103149
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16 ₄ (4)	17 ₄ (5)	18 ₃ (6)	19 ₄ (7)	20 ₃ (8)
HAAS Section								
AA	2.985	3.005		3.000	3.000	2.995	2.998	2.999
AB	0.440	0.460		.450	.450	.450	.450	.450
AC	0.125	0.160		.136	.135	.134	.135	.132
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.190	.190	.190	.190	.190
AF	0.125	0.160		.136	.137	.137	.136	.137
AG	0.140	0.160		.154	.151	.147	.149	.150
AH	1.360	1.400		1.376	1.380	1.379	1.380	1.3785
AI	0.040	0.060		.053	.0475	.048	.048	.050
AJ	1.190	1.230		1.2195	1.2205	1.220	1.220	1.222
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.530	2.530	2.530	2.530	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.261	.261	.261	.261	.261
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by:		Date:	13-07-25
Audited by:	44 	Date:	13/07/25
Preliminary Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	



NOTES:

1) MATERIAL: 17-4 PH STAINLESS STEEL, H900 OR H925 CONDITION
MIN UTS = 170 KSI (38 HRc)
(REF DART SPEC. D6104)

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 (REF X.XXX = ±0.010) UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: DART LOGO (PER DART SUPPLIED GRAPHIC) AND PART NUMBER IN THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP, PER DART QSI 044 6.3.

7) WEIGHT: 0.78 lb

8) FOR THE ENTIRE INNER CONCAVE SURFACE: ABRASE SURFACE WITH 400-GRIT SANDPAPER. REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY 0.03" TO 0.05" THICK LAYER OF 3M SCOTCH-WELD 2216 B/A ADHESIVE TO MATING SURFACE OF SUPPORT. ALLOW TO CURE FOR 24 HOURS.

D2893-1 SUPPORT

RELEASED
2011-07-28

C	RMV FINISH, ADD 3M 2216, ADD H925 MAT'L OPTION	CP	11.07.15
B	UPDATE DIMS AS MFG, PRIME INSIDE	PH	07.03.10
A	NEW ISSUE	CP	01.01.10
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.07.15		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. D2893		REV. C SHEET 1 OF 1	
TITLE Ø2.750 SUPPORT		SCALE NT	
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103149 11 8
1-12

